

IN THE CLAIMS:

1. (Currently Amended) A system of resource based virtual communities comprising:

a community server operable to manage a plurality of resource based virtual communities associated with each of a plurality of accessed resources, and operable to connect ones of the plurality of users to the resource based virtual community associated with the accessed resource when they access the resource.

~~where the community composes of the all resource users and whenever a person accesses or uses the resource, he automatically becomes part of the community. With people from all over the world who do not know each other linked together when they access the same resource, they form the community based on that resource.~~

2. (Currently Amended) The system of claim 1, wherein each of the plurality of resources is associated with a corresponding community.
~~further comprising: Every resource in the Internet or in the world can have one corresponding virtual community and every user in the Internet can participate to the virtual communities.~~

3. (Currently Amended) The system of claim 1, wherein each of the plurality of resources comprises a web resource.

~~where: Resources are web resources in the Internet that can be directly accessible using web browsers include any web site, any web page, and newsgroup or discussion forum.~~

4. (Currently Amended) The system of claim 1, wherein each of the plurality of resources comprises a non-web resource.

~~where: The virtual communities are based on resources other than web resources such as software products, bulletin boards, games FTP site, newsgroup, files, images, photos, or any other products that multiple people can share or use.~~

5. (Currently Amended) The system of claim 1, wherein each of the plurality of resources comprises a unique name.

~~where: Every resource is identified by a unique URL or other kind of unique name.~~

6. (Currently Amended) The system of claim 1, wherein users automatically become members of the resource based virtual community associated with the accessed resource when they access the resource unless the users are required to login to the community server.

~~where: The system can automatically join the user to the virtual community at the same time the user is accessing or using the resource, where no explicit login is required. Of course, the user can provide login info if the user chooses to be recognized by the username the user chooses.~~

7. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide community services to community members.

~~where: The virtual communities can provide its members useful feedbacks, comments, reviews and references or other useful information for the resource.~~

8. (Currently Amended) The system of claim 1, wherein the community server is further operable to enable communication between community members.

~~where: Users of the virtual communities can communicate with the community and to each other; if they are all online, real time communication is also possible; when they are offline, messages can be delivered to them next time users joined.~~

9. (Currently Amended) The system of claim 1, wherein the community server is further operable to enable community members to perform community activities.

~~further comprising: Once users joined the virtual community when they access the resource, they can also access all services provided by the community, such as making comments, publishing reviews, rating the resource, writing notes, sending (instant) messages, sharing whiteboard, or chatting with others or even the whole community.~~

10. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide collaboration between community members,
~~where: Members of the virtual communities can participate collaboration activities such as helping each other, asking and answering questions, exchanging ideas, interests matching, scheduling meetings, online auction, on-line dating, broadcasting or other campaign such as marketing or advertisement.~~

11. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide notification to community members when a new user joins the community.

~~where: All current community members can be notified when a new user joins the community or leaves the community, in real time.~~

12. (Currently Amended) The system of claim 1, wherein the community server is further operable to enable community members to communicate with users outside the community.

~~where: Members of virtual communities can communicate with other virtual communities or people outside the resource-based virtual communities.~~

13. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide community members with information regarding the community.

~~where: At the same time users are using the web resource, browsing web or using software, the virtual community based on that resource can provide user dynamic status about the community such as statistical information of the resource, hit counts, comments, ratings, reviews, or any other information that can help new users to decide the value of the resource.~~

14. (Currently Amended) The system of claim 13, wherein the information comprises information presented to the community members while they are accessing the resource.

~~1, where: The current virtual community information can be presented to user through a separate channel, in a separate window, popup dialog or other means or embedded in the users' content that enhance users' resource using experience.~~

15. (Currently Amended) The system of claim 1, wherein the community server is further operable to enable new community services from community members.

~~where: Where virtual community members can extend the communities by add new services, creating new activities to the communities.~~

16. (Currently Amended) The system of claim 1, wherein the resources comprise private resources having a unique name.

~~where: The resources are private resources in the local area network where the resources still be can uniquely identified URL.~~

17. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide community member authentication services.

~~further comprising: Authentication can be enabled for those communities in the community servers and various means of security can be enforced such as username password, cookies or any other kind of security mechanism.~~

18. (Currently Amended) The system of claim 1, wherein the community server is provided by the resource server by setting up and serves the virtual community along with the resource.

~~where: The virtual community functions are provided by each web servers themselves by setting up communities for currently web page viewers.~~

19. (Currently Amended) The system of claim 18, wherein each of the plurality of web resource servers is operable to contact other community servers to provide community services.

~~1, where: The virtual community functions are provided by each web servers by contacting the other virtual community servers based on every web request the user is accessing and then sends both results of the request and the community info back to the client.~~

20. (Currently Amended) The system of claim 1, wherein the community server is disposed behind a firewall to limit community members to users in an intranet.

~~where: Community server is set up behind firewalls in local area networks which limits the members to all users from within the same intranet.~~

21. (Currently Amended). The system of claim 1, wherein the community server is further operable to provide user privacy preferences to community members.

~~further comprising: The user can set preference to allow the system to protect his privacy or determine whether to sign him to the virtual community automatically or not, whether to shown as anonymous user or invisible users.~~

22. (Currently Amended) The system of claim 1, wherein the community server is further operable to uniquely identify each community member across multiple communities.

~~where: Users are also uniquely identified either by a selected user name or by its IP address so that one user can join with multiple virtual communities; send or receive messages with members from other communities.~~

23. (Currently Amended) The system of claim 1, wherein the community server is further operable to track community member's activities with the community member's permission.

~~where: The system can keep track of all these virtual communities that the user has visited so far with user's permission.~~

24. (Currently Amended) The system of claim 1, wherein the community server is further operable to organize an information content of each virtual community into a plurality of hyperlinked pages.

~~where: Every virtual community can organize their information, contents or services in hierarchy, hypertext or web format so that users can explore them virtual communities by following links or directly browsing.~~

25. (Currently Amended) The system of claim 1, wherein the community server is further operable to keep statistical information regarding the community.

~~where: The virtual community server keep track of all statistical information for every resource-based virtual community like hit counts, total users, current online users, users' ratings or comments about each resource.~~

26. (Currently Amended) The system of claim 1, wherein the community server is further operable to connect users who have accessed the same resource and users who are accessing the same resource.

~~where: Different people from all over the world are connected together in the community with one thing in common: they either have used the same resource, are using the resource or will use the resource.~~

27. (Currently Amended) The system of claim 1, further comprising a proxy server coupled to the community server and a web resource server, the proxy server operable to serve a web resource content and connect to the community based on the resource being served.

~~where: The virtual communities are private communities based on private resources that allow access to only authorized users.~~

28. (Currently Amended) The system of claim 1, wherein the community server is further operable to combine a plurality of communities into a larger community based upon similar topical resources.

~~further comprising: Different virtual communities based on different resources can be grouped together to form larger communities which covers similar resource, topics, or subjects.~~

29. (Currently Amended) The system of claim 1, wherein the community server is further operable to enable searches of each of the plurality of communities.

~~where: The virtual communities can be reached from a central web site and searched by various keywords, topics or selected from categories, similar to any other kinds of communities.~~

30. (Currently Amended) The system of claim 1, wherein the community server is further operable to provide customized filtering preferences set by users, systems and communities.

~~where: The virtual communities can perform customized filtering for communities and contents based on settings from users, systems, communities or others.~~

Claims 31-59 (Canceled)

60. (Currently Amended) A global universal virtual community server system for mapping each of a plurality of ~~to provide ways to map various~~ resources to a different virtual community area ~~areas~~ by resource URL comprising:

a global universal virtual community server including the plurality of virtual community areas, each of a plurality of resources mapped to a virtual community area; and

~~The universal community server composes the following:~~ a global user database within the global universal virtual community server that holds all user information for users ~~possible users in the Internet are accessing any of the~~ plurality of resources, including a user IP address or email address, the virtual community areas holding community information, data and links related to each of the users in the global user database, resource in the Internet;

~~Various virtual community areas or sub-servers to hold the community information, data and links of all current community users in the users' database;~~

~~Mapping mechanisms to map any resource URL to the given virtual community area areas, and map from any known user identify, give email or IP address, to a particular user entry in the global user database;~~

~~Request dispatcher to dispatch all users' requests in the Internet to the corresponding virtual community area or sub-servers by the resource URL.~~

61. (Currently Amended) The system of claim 60, wherein the virtual community areas ~~area or sub-servers~~ are stored in directories, files, or databases, ~~either locally or distributed machines.~~

62. (Currently Amended) The system of claim 60, wherein the global ~~where:~~ The universal virtual community server comprises ~~can be~~ a group of servers.

63. (Currently Amended) The system of claim 60, ~~further comprising:~~

~~The wherein the global user database comprises a distributed database can be implemented in files, database in local system or distributed systems.~~

64. (Currently Amended) The system of claim 60, where: wherein each
~~Every~~ virtual community area is ~~or sub-servers are created on demand, or in the~~
~~fly only when a the first user accesses a resource starts to access the virtual~~
community.

65. (Currently Amended) The system of claim 60, where: wherein the
The global user database creates ~~may create~~ a new user record only when a
new user entry is queried and is not ~~does not~~ yet in the database.

66. (Currently Amended) The system of claim 60, where: wherein each
Each virtual community area comprises ~~sub-server can be simply a web server or~~
web pages.

67. (Currently Amended) The system of claim 60, where: wherein each
Each virtual community area comprises ~~contains~~ information regarding the
community including about currently online users, total hit counts, bulletin boards
~~and comments left by other users.~~

68. (Currently Amended) The system of claim 60, where: wherein each
Every virtual community area comprises ~~also composes of many server side~~
components that support user and community interactivity and activities ~~such as~~
~~signing on a new user, logging out a user, sending messages, and any other~~
services.

69. (Currently Amended) The system of claim 60, where: wherein each
virtual community area may utilize ~~Various~~ server side technologies including
~~from~~ server side script, CGI, Servlet, asp ~~to recent web services and~~ weblogs
~~weblog can be used in every virtual community area or sub-servers.~~

70. (Currently Amended) The system of claim 60, ~~where:~~wherein the
The global user database comprises ~~can keep~~ the current status of individual
~~users' user's~~ information, ~~including its identifier, current status such as whether~~
~~online or offline.~~

71. (Currently Amended) The system of claim 60, ~~where:~~wherein the
The global user database stores users' personal data including like messages
from other ~~users~~ people, preferences or privacy and security ~~settings such as~~
~~privacy, and security settings.~~

72. (Currently Amended) The system of claim 60, ~~further comprising:~~
wherein the The universal community server is operable to ~~can link or group~~
different community ~~communities~~ areas ~~or sub-servers~~ together to form a larger
community for a bigger scope of resources.

73. (New) A method of forming resource based virtual communities
comprising the steps of:
 providing a community server operable to manage a plurality of resource
based virtual communities associated with each of a plurality of accessed
resources;
 each of a plurality of users accessing the resources; and
 each of the plurality of users connecting to the resource based virtual
community associated with the accessed resource.

74. (New) The method of claim 73, wherein the resource being accessed by
the user is a web resource, including a web site, a web page, a newsgroup or a
discussion forum.

75. (New) The method of claim 73, wherein the resource being accessed by
the user is a non-web resource, including a software product, a bulletin board, a

game, an FTP site, a file, an image, a photo, or products that can be shared by users.

76. (New) The method of claim 73, wherein each of the plurality of accessed resources is associated with a corresponding resource based virtual community.

77. (New) The method of claim 73, further comprising enabling new community services from community members.

78. (New) The method of claim 73, further comprising providing users community information and community services; including hit count, total users, current users, feedback, comments, ratings, reviews, references or other useful information for the resource.

79. (New) The method of claim 73, further comprising enabling user collaboration with other community members; including making comments, publishing reviews, rating resources, writing notes, sending messages, sharing whiteboards, chatting, helping each other, asking and answering questions, exchanging ideas, interests matching, scheduling meetings, online auctions, online dating, broadcasting or other campaigns such as marketing or advertisements.

80. (New) The method of claim 73, wherein each of the plurality of users accessing the resources and resource based communities comprises the steps of:

- each of a plurality of users accessing the resources;
- the accessed resource returning the original resource; and
- the accessed resource connecting users to the virtual community based on the accessed resource.

81. (New) The method of claim 73, wherein each of the plurality of users accessing the resources comprises the steps of:
- each of a plurality of users accessing the resources through a proxy server;
 - the proxy server returning the original resource; and
 - the proxy server connecting the user to the virtual community based on the accessed resource.
82. (New) The method of claim 73, wherein each of the plurality of users connecting to the resource based virtual community associated with the accessed resource comprises the steps of:
- a client side software installed to user's computer discovering the resource accessed by the user; and
 - the client side software connecting the user to the virtual community based on the accessed resource.
83. (New) The method of claim 73, further comprising the user accessing the virtual community along with the accessed resource in a non-disruptive way including using context menus, status bars, popup windows, balloon help messages, task bars or embedded frames inside a current web page.
84. (New) The system of claim 1, wherein each of the plurality of resources comprises a non-Internet based product including a software, a product, a device, an audio, a video, a service or other commodities.
85. (New) The system of claim 1, wherein the user connects to the resource based virtual communities through a mobile device including a PDA and a cellular phone.
86. (New) The system of claim 1, further comprising a client side software installable to a user's computer, the software operable to detect users activity of

accessing a resource and connecting to the virtual community based on the accessed resource.

87. (New) The system of claim 86, wherein the client side software also provides a toolbar button installable on user's browser operable of connect to the resourced based virtual community when selected by the user.

88. (New) The system of claim 86, wherein the client side software also provides a context menu installable on the user's browser operable for connecting to the resourced based virtual community when selected by the user.

89. (New) The method of claim 86, wherein the client side software is installed manually by the user or automatically when the user accesses the resource.

90. (New) The method of claim 86, wherein the client side software is operable to display a virtual community page displayed in a separate frame, popup window or balloon window along with the main resource.

91. (New) The system of claim 86, wherein the client side software is a standalone software agent.

92. (New) The system of claim 86, wherein the client side software is operable to discover current web resources accessed by the user by monitoring web requests from browsers.

93. (New) The method of claim 86, wherein the client side software is operable to detect the current resource being used by hooking into the protocol handling chain, or using a protocol filter, a kernel driver, or a customized content handler; or by listening to the system or windows event from browsers, or hooking into process, system and network APIs.

94. (New) The system of claim 86, wherein the client side software is a browser.
95. (New) The system of claim 86, wherein the client side software is operable to make multiple connections to multiple virtual communities based on multiple resources the user is accessing and thus enabling users to participate in multiple communities simultaneously.
96. (New) The system of claim 86, wherein the client side software is a browser plugin integrated in a user's existing web browser.
97. (New) The system of claim 96, wherein the browser plugin includes browser helper objects, plugins, applets, Javascript, flash, ActiveX object, content, dynamic html, connection or protocol filters and any other type of software extension.
98. (New) The system of claim 86, wherein the client side software can be a special component, shared object, dynamic library, driver or other extensions.
99. (New) The system of claim 86, wherein the client side software is operable to detect the current software used by the user and then connect to the associated virtual community based on that resource.
100. (New) The system of claim 99, wherein the client side software is statically or dynamically linked to a software resource and operable to run along with the software resource when the software resource is started by the user.
101. (New) The system of claim 99, wherein the client side software resides the software resource to provide new functions, features, services and applications.